Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**5.9 Similarity Wrap Up**

Directions: Write your answer to each question in complete sentences. Make sure to answer each question thoroughly. You can use the space below to answer the questions or a separate piece of paper.

1. What makes two figures **similar**? How is similarity different than congruence?
2. Why is dilation called a similarity transformation?
3. How do you dilate a pre-image when the center is NOT at the origin (0, 0)? Describe each step clearly.
4. Extra Credit: When dilating a pre-image with a center at the origin [(0, 0)], you can multiply the coordinates of each vertex by the scale factor to find the coordinates of the image. Why does this work when the center is at the origin even though it will NOT produce a correct answer when the center is located at a point other than the origin?